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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,297	01/23/2001	Helmut Goeldner	1997/49442	4017
23911	7590	12/17/2003	EXAMINER	
CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			CHORBAJI, MONZER R	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

09/04

Office Action Summary

Application No.

09/744,297

Applicant(s)

GOELDNER, HELMUT

Examiner

MONZER R CHORBAJI

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23,24,26-33 and 35-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23,24,26-33,35-43 and 45-47 is/are rejected.
- 7) ☒ Claim(s) 44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This non-final office action is in response to the RCE received on 09/29/2003

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 23 and 33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 23, line 1; applicant added the term "discontinuous", however; such a term cannot be found in the original disclosure. Also, in claim 23, line 16; applicant added the phrase "greater than ambient air pressure", however; such a phrase cannot be found in the original disclosure. The same applies to claim 33.

On page 8 of the "Remarks" section, applicant refers to certain pages in the specification for support. However, such pages do not teach the newly added limitations.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1744

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 23-24, 26-28, 31-33, 35-36, 40-43, and 45-47 are rejected under 35

U.S.C. 103(a) as being unpatentable over Goldner et al (U.S.P.N. 5,270,000) in view of

Von Lersner (U.S.P.N. 5,217,688) and further in view of Davis (U.S.P.N. 5,277,136).

With respect to claims 23 and 33; Goldner et al teaches the following: a method and an apparatus for treating contaminated material (col.1, lines 5-6), an input unit (figure 1, 3), a conveyor system (figure 1, 24 and 16), a treatment chamber, which slants upward from a lower inlet (figure 1, 16), treatment chamber includes a first treatment zone (figure 1, 7 and 18) and a second treatment zone (figure 1, the unlabeled internal space of 16), an upper discharge end (figure 1, 27), contaminated material is moistened (figure 1, 19) in a liquid reservoir (since the treatment chamber 16 is slanted, it will inherently contains a reservoir in its lower end from the accumulating liquid) in first treatment zone (first heating zone) which is adjacent the lower end of the chamber by liquid present in the material (contaminated material inherently contains liquid) or water added (figure 1, 20) from the outside the treatment chamber (figure 1, 19), liquid in reservoir having a temperature below the boiling point of water by having

Art Unit: 1744

heating means (col.10, lines 33-36. This would inherently increase the temperature of liquid sprayed by 19), and in the second treatment zone which extends from the first treatment zone to the upper end of the chamber, the material is heated to a temperature above the boiling point of water (col.1, lines 59-67) to create steam pressure (col.2, lines 46-51). However, Goldner et al fails to disclose the following: a discontinuous process, means for closing off the input region and the discharge region of the treatment chamber, and to generate steam pressure greater than ambient air pressure. With respect to claims 23 and 33, Von Lersner teaches a discontinuous process (col.6, lines 4-11), but fails to disclose means for closing off the input region and the discharge region of the treatment chamber and to generate steam pressure greater than ambient air pressure. With respect to claims 23 and 33, Davis teaches the following: means for closing off the input (18) and the discharge (26) regions of the treatment chamber (22) and to generate steam pressure greater than ambient air pressure (col.8, lines 10-16). Thus, it would have been obvious to one having ordinary skill in the art to modify the method and apparatus of Goldner et al to include closing off means on both the input and the discharge regions in order to prevent bacteria in the air inside the system from escaping into the environment other than through the dual filtration system (Davis, col.2, lines 47-60).

With respect to claim 24, Goldner et al teaches that the contaminated material is contaminated with infectious microorganisms (col.1, line 6).

With respect to claims 26-28, and 35, Goldner et al teaches the following: the steam pressure in the second zone is generated by evaporation of the inherent moisture

Art Unit: 1744

(col.2, line 46) or by evaporation of liquid water added to the contaminated material from outside the treatment chamber (col.2, line 46 and figure 1, 19 and 20), and the steam pressure in the second zone is generated (heating of the contaminated material by steam, col.10, line 13) by introducing steam into the chamber (col.10, lines 9-14).

With respect to claim 36, Goldner et al introduces water into the first heating zone (figure 1, 20 and 19).

With respect to claims 31-32, 43, and 46, Goldner et al teaches the following: contaminated material is introduced in portions (figure 1, 13) into the treatment chamber (figure 1, 3), portions introduced and discharged from the treatment chamber through locks (figure 1, 4 and figure 5, 64).

With respect to claims 40-42, and 45, Goldner et al teaches the following: heating means provided in an inner wall of chamber (figure 5, 65), heating means is provided in conveyor system (figure 1, 25), means for controlled introduction of microwave energy into treatment chamber (figure 6, 16 and 25), a shredder in input unit (figure 1, 6 and 15).

With respect to claim 47, Goldner et al teaches a plurality of treating apparatuses (figure 1, 18, 16, 17, 44, and 50) arranged parallel. However, having such a plurality of treating apparatuses is within the purview of a person skilled in the art so that the capacity of treating contaminated material can be increased.

6. Claims 29-30 and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldner et al (U.S.P.N. 5,270,000) in view of Von Lersner (U.S.P.N.

Art Unit: 1744

5,217,688) and further in view of Davis (U.S.P.N. 5,277,136) and Kline et al (U.S.P.N. 5,425,925).

With respect to claims 29-30 and 37-39, Goldner et al, Von Lersner, and Davis fail to teach the following: a mechanism to control the excess water build up which inherently results from having an inclined chamber, recycling means of the water, and a collection vessel. However, with respect to claims 29-30 and 37-39, Kline et al, which is in the art of treating contaminated material (col.1, lines 13-19) by having an inclined chamber (figure 2, 76) teaches the following: the first treatment zone includes a liquid reservoir (figure 1, 104), which is regulated by a weir or an overflow (figure 1, 108); liquid discharged from the weir or an overflow is recycled back to the liquid reservoir (figure 1, 54 and 46); a collection vessel (figure 1, 106, 54, 162, and 46), and where the weir or an overflow (figure 1, 108), the collection vessel (figure 1, 106), and the return line (figure 1, 54) are maintained at the same pressure as the treatment chamber (figure 1, 46). Since the chamber (figure 1, 46) is opened at its lower end (figure 1, 88 and 89) to the liquid reservoir, thus the above-mentioned structures are at the same pressure. Thus, it would have been obvious to one having ordinary skill in the art to modify the method and apparatus of Goldner et al in order to design a tank in the lower end of the chamber to enable the collection of fines for periodic removal (Kline et al, col.11, lines 21-23).

Allowable Subject Matter

7. Claim 44 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the

Art Unit: 1744

base claim and any intervening claims. This objection to claim 44 is due to the Declaration under 37 C.F.R. 1.132 received on 02/04/2003.

Response to Arguments

8. Applicant's arguments with respect to claims 23-24, 26-33, and 35-47 have been considered but are moot in view of the new ground(s) of rejection.

On page 10 of the remarks section, applicant argues, "In fact, Davis teaches away from using a pressurized chamber, pointing out the cost advantage of a system that does not require a pressure vessel". The teaching of Davis is a matter of opinion that does not preclude others from generating pressurized steam in a closed vessel in order to disinfect contaminated material. As a matter of fact, Davis explains that it is possible to operate the vessel under pressurized conditions such that specific pressure range is disclosed that is greater than ambient air pressure (col.8, lines 14-15). Thus, one skilled in the art would recognize after reading the Davis reference that that there are available alternative treatment processes by either an open system or a closed steam pressurized system.

On page 11 of the remarks section, applicant argues, "The Davis system could therefore not normally build steam pressure greater than ambient pressure". In col.8, lines 12-14, Davis states that the system can be operated in a closed manner (emphasis added) in order to build up steam pressure readings much greater than ambient air pressure. Clearly, in order to achieve such a high-pressure readings, all the vessel inlets and outlets (including the discharge to the fan) must be closed as taught by the Davis reference.

On page 11 of the remarks section, applicant argues, "Davis does not describe how or even if the discharge to the fan is closed off". Davis states in col.8, lines 15-17, that when a steam-pressurized system is to be used then it would have to be a pressure vessel. This indicates that a special vessel designed for high pressure with inherent closing mechanism for closing all inlets and outlets including the discharge to the fan in order to build up steam pressure greater than ambient air pressure within the vessel.

On page 11 of remarks section, applicant argues, "Davis does not teach the direct use of pressurized steam on waste material as a normal operating feature of the system". In col.8, lines 12-14, Davis explicitly teaches of injecting directly steam into the waste if the alternative treatment process is desired.

On page 12 of the remarks section, applicant argues, "Thus, one skilled in the art would not be inclined to modify Davis to create a system where steam is regularly used directly upon waste material. Further, the steam in Davis is provided by multiple emergency steam injectors. This is significantly different from the presently claimed invention, where steam is generated by heating the contaminated material". Such limitations are already taught by the Goldner reference. The Davis reference is applied to show that building up steam pressure greater than ambient air pressure within a vessel to directly disinfect contaminated material is known. The Davis reference was not used to show that steam is generated by heating the contaminated material.

On page 13 of the remarks section, applicant argues, "Kline does not disclose or suggest the use of steam pressure in the process". The Kline reference is used only for the water regulation mechanism and not for any other reason.

On page 13 of the remarks section, applicant argues, "Similarly, Kline does not teach a system that may be closed off or where the contaminated material may be heated in order to build up steam pressure". Again, the Kline reference is used only for the water regulation mechanism and not for any other reason.

Finally, The Von Lersner reference is applied to show that the concept of the discontinuous treatment of contaminated material is known (col.6, lines 4-11).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R CHORBAJI whose telephone number is (703) 305-3605. The examiner can normally be reached on M-F 8:30-5:00.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ROBERT J WARDEN can be reached on (703) 308-2920. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

11. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Monzer R. Chorbaji *MRC*
Patent Examiner
AU 1744

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